

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (canceled)
2. (currently amended) A package indicator comprising:
~~at least one LED;~~
a first LED adapted to produce first light having a first spectrum;
a second LED adapted to produce second light having a second spectrum, the first spectrum being different than the second spectrum, the first LED and second LED being arranged to permit combining of the first light and the second light; and
a controller for generating and communicating control signals to the ~~at least one LED first LED and the second LED,~~
wherein the controller is associated with a program input for receiving signals configured to respond to at least one input signal indicative of at least one environmental condition condition associated with a package, the controller further being configured to control the first LED and the second LED such that the indicator is capable of producing at least three different perceivable colors of light based on the at least one environmental condition associated with the package and at least one of a sensor, transducer, timer, receiver, signal generator, wherein the at least one of a sensor, transducer, timer, receiver, signal generator communicates signals to the program input.
3. (currently amended) A package indicator comprising:
at least one LED comprising multiple semiconductor dies capable of emitting at least first light having a first spectrum and second light having a second spectrum, the first spectrum being different than the second spectrum, the first light and the second light being

independently controllable such that at least three different colors may be generated by the at least one LED; two or more LEDs;

a controller for generating and communicating control signals to the at least one LED two or more LEDs wherein the controller is associated with a program input for receiving signals indicative of a condition of a package environmental conditions; and

at least one of a sensor, transducer, timer, receiver, signal generator, wherein the at least one of a sensor, transducer, timer, receiver, signal generator communicates the signals to the program input, wherein the at least three different colors generated by the at least one LED relate to the condition of the package.

4. (currently amended) A system for indicating a condition of an item, comprising:

an illumination system for providing illumination suitable for conveying information and capable of receiving input from an information system, the illumination system comprising (i) a first LED adapted to produce first light having a first spectrum, and (ii) a second LED adapted to produce second light having a second spectrum, the first spectrum being different than the second spectrum, and the first LED and second LED being arranged to permit combining of the first light and the second light; and

the an information system for providing input to the illumination system;

wherein the information system provides information about the item and the illumination system is controlled to provide at least three different colors of illumination that indicate indicates the information.

5. (original) A system of claim 4, wherein the item is a package and the illumination system indicates information about the condition of the package.

6. (original) A system of claim 4, wherein the item is a container and the illumination indicates information about the container.

7. (currently amended) A system method of claim 6, wherein the item is a container for an item selected from the group consisting of a body part, an organ, a tissue, blood, plasma, a

liquid, an organic liquid, clothing, a food, apparel, a battery-operated item, a computer, a phone, a beverage, a beer, a soft drink, a wine, an alcoholic beverage, a perishable item, a fruit, a vegetable, a meat, a dry good, a cereal, a grain, a tobacco, an animal, and a plant.

8. (original) A system of claim 4, wherein the condition is selected from the group consisting of age, elapsed time, exposure to temperatures, exposure to radiation, exposure to a microbe, exposure to a bacterium, exposure to a virus, exposure to heat, exposure to cold, exposure to moisture, exposure to pressure, exposure to acceleration, exposure to forces, exposure to vibration, exposure to light, exposure to shock, exposure to electricity, exposure to sound, exposure to humidity, and exposure to magnetism.

9. (original) A system of claim 8, wherein the illumination system controls lighting elements by pulse width modulation.

10. (original) A system of claim 4, wherein the illumination system indicates exposure of a package for a perishable item to an environmental condition.

11. (currently amended) A system of claim 10 11, wherein the environmental condition is heat.

12. (original) A system of claim 11, wherein the environmental condition is passage of an amount of time in excess of a selected amount of time.

13. (original) A system of claim 4, wherein the illumination system gradually changes to a selected color with the passage of time.

14. (original) A system of claim 13, wherein the illumination system changes to red with passage of time.

15. (original) A system of claim 4, wherein the illumination system changes illumination to indicate exposure to temperatures that exceed a predetermined acceptable range.

16. (original) A system of claim 4, wherein the information system tracks a plurality of environmental conditions and the illumination system illuminates the item to reflect the different environmental conditions.

17. (original) A system of claim 4, further comprising a sensor for receiving signals to supply the information system with information.

18. (original) A system of claim 4, further comprising providing a transmitter for transmitting information from the information system about the item.

19. (original) A system of claim 4, wherein the information system obtains information about shipping events and wherein the illumination system indicates information about shipping events.

20. (original) A system of claim 4, wherein the illumination system provides illumination for reflecting information useful for maintaining inventory in a facility.

21. (currently amended) A system of claim 4, A system for indicating a condition of an item, comprising:

an illumination system for providing illumination suitable for conveying information and capable of receiving input from an information system, the illumination system comprising
(i) a first LED adapted to produce first light having a first spectrum, and (ii) a second LED
adapted to produce second light having a second spectrum, the first spectrum being different
than the second spectrum, and the first LED and second LED being arranged to permit
combining of the first light and the second light; and
the information system for providing input to the illumination system;

wherein the information system provides information about the item and the illumination system is controlled to provide at least three different colors of illumination that indicate the information, wherein the information system stores first information for controlling illumination prior to an item being displayed for retail purposes and second information for controlling illumination when the item is being displayed for retail purposes.

22. (original) A system of claim 21, wherein the first information controls illumination to indicate shipping information of an item and the second information controls illumination to provide an aesthetic feature for the item.

23. (currently amended) A method of providing an indicator for a package, comprising:
providing a first LED adapted to produce first light having a first spectrum at least one LED;
providing a second LED adapted to produce second light having a second spectrum, the first spectrum being different than the second spectrum;
providing a controller for generating and communicating control signals to the first LED and second LED in response to at least one input signal at least one LED wherein the controller is associated with a program input for receiving signals indicative of at least one environmental condition associated with the package conditions; and
providing at least one of a sensor, transducer, timer, receiver, signal generator, wherein the at least one of a sensor, transducer, timer, receiver, signal generator communicates signals to the program input
controlling the first LED and the second LED, in response to the at least one input signal, to produce at least three different perceivable colors of light based on the at least one environmental condition.

24. (currently amended) A method of providing a package indicator comprising:
providing at least one LED comprising multiple semiconductor dies capable of emitting at least first light having a first spectrum two or more LEDs; and second light having a second spectrum, the first spectrum being different than the second spectrum;

~~providing a controller for generating and communicating control signals to the at least one LED two or more LEDs wherein the controller is associated with a program input for receiving signals indicative of at least one environmental condition associated with a package conditions; and~~

~~controlling the at least one LED in response to the control signals to produce at least three different perceivable colors of light providing at least one of a sensor, transducer, timer, receiver, signal generator, wherein the at least one of a sensor, transducer, timer, receiver, and signal generator that communicates signals to the program input.~~

25. (currently amended) A method of providing a light-based indicator system for indicating a condition of an item, comprising:

~~providing an illumination system for providing illumination suitable for conveying information and capable of receiving input from an information system, the illumination system comprising (i) a first LED adapted to produce first light having a first spectrum, and (ii) a second LED adapted to produce second light having a second spectrum, the first spectrum being different than the second spectrum, and the first LED and second LED being arranged to permit combining of the first light and the second light; and~~

~~providing an information system for providing input to the illumination system;~~

~~wherein the information system provides information about the item and the illumination system is controlled to provide at least three perceivable different colors of illumination that indicate indicates the information.~~

26. (original) A method of claim 25, wherein the item is a package and the illumination system indicates information about the condition of the package.

27. (original) A method of claim 25, wherein the item is a container and the illumination indicates information about the container.

28. (original) A method of claim 27, wherein the item is a container for an item selected from the group consisting of a body part, an organ, a tissue, blood, plasma, a liquid, an

organic liquid, clothing, a food, apparel, a battery-operated item, a computer, a phone, a beverage, a beer, a soft drink, a wine, an alcoholic beverage, a perishable item, a fruit, a vegetable, a meat, a dry good, a cereal, a grain, a tobacco, an animal, and a plant.

29. (original) A method of claim 25, wherein the condition is selected from the group consisting of age, elapsed time, exposure to temperatures, exposure to radiation, exposure to a microbe, exposure to a bacterium, exposure to a virus, exposure to heat, exposure to cold, exposure to moisture, exposure to pressure, exposure to acceleration, exposure to forces, exposure to vibration, exposure to light, exposure to shock, exposure to electricity, exposure to sound, exposure to humidity, and exposure to magnetism.

30. (original) A method of claim 29, wherein the illumination system controls lighting elements by pulse width modulation.

31. (original) A method of claim 25, wherein the illumination system indicates exposure of a package for a perishable item to an environmental condition.

32. (original) A method of claim 31, wherein the environmental condition is heat.

33. (original) A method of claim 31, wherein the environmental condition is passage of an amount of time in excess of a selected amount of time.

34. (original) A method of claim 25, wherein the illumination system gradually changes to a selected color with the passage of time.

35. (original) A method of claim 34, wherein the illumination system changes to red with passage of time.

36. (original) A method of claim 25, wherein the illumination system changes illumination to indicate exposure to temperatures that exceed a predetermined acceptable range.

37. (original) A method of claim 25, wherein the information system tracks a plurality of environmental conditions and the illumination system illuminates the item to reflect the different environmental conditions.

38. (original) A method of claim 25, further comprising providing a sensor for receiving signals to supply the information system with information.

39. (original) A method of claim 25, further comprising providing a transmitter for transmitting information from the information system about the item.

40. (original) A method of claim 25, wherein the information system obtains information about shipping events and wherein the illumination system indicates information about shipping events.

41. (original) A method of claim 25, wherein the illumination system provides illumination for reflecting information useful for maintaining inventory in a facility.

42. (currently amended) A method of claim 25, A method of providing a light-based indicator system for indicating a condition of an item, comprising:

providing an illumination system for providing illumination suitable for conveying information and capable of receiving input from an information system, the illumination system comprising (i) a first LED adapted to produce first light having a first spectrum, and (ii) a second LED adapted to produce second light having a second spectrum, the first spectrum being different than the second spectrum, and the first LED and second LED being arranged to permit combining of the first light and the second light; and

providing an information system for providing input to the illumination system;
wherein the information system provides information about the item and the illumination system is controlled to provide at least three different colors of illumination that indicate the information, wherein the information system stores first information for controlling

illumination prior to an item being displayed for retail purposes and second information for controlling illumination when the item is being displayed for retail purposes.

43. (original) A method of claim 42, wherein the first information controls illumination to indicate shipping information of an item and the second information controls illumination to provide an aesthetic feature for the item.